

Exhibit 4

**Work Analysis of Goldman Sachs Professionals
Holding the Corporate Titles of Associate and Vice President in the
Investment Banking Division, Investment Management Division, and
Securities Division**

Chen-Oster, et al.
v.
Goldman, Sachs & Co. and The Goldman Sachs Group, Inc.
(Case No. 10-CV-06950)

**Eric M. Dunleavy, Ph.D.
DCI Consulting Group, Inc.**

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Executive Summary

I am an Industrial/Organizational (I/O) psychologist and was retained by Sullivan & Cromwell LLP, counsel for the defense, in *Chen-Oster, et al. v. Goldman, Sachs & Co. and The Goldman Sachs Group, Inc.*, (Case number 10-CV-06950). At the request of counsel I evaluated the extent to which professionals holding the corporate titles of Associate and Vice President in the Investment Banking Division (IBD), Investment Management Division (IMD), and Securities Division (“Divisions”) perform the same work activities (e.g., responsibilities, tasks), have the same worker characteristics (e.g., knowledges, skills, abilities, and personal attributes), and the same contextual work factors (e.g., interactions with others, work environment, and structural job characteristics). Counsel asked me to opine on the following issues:¹

- Whether professionals holding the corporate title of Associate in IBD, IMD, and Securities all perform the same roles.²
- Whether professionals holding the corporate title of Vice President in IBD, IMD and Securities all perform the same roles.
- If the answer to either or both of these two prior questions is no, what is the extent and nature of the variability of roles for professionals holding the corporate titles of Associate and Vice President.

As described in more detail below, I examined these questions using standard techniques of I/O psychology, including by using a well-accepted methodology from the field to conduct an individualized structured work analysis to assess whether Associates and Vice Presidents perform the same work activities, are required to have the same worker characteristics, and the same contextual work factors. I describe my methodology in detail in this report, but in brief, I undertook the following steps:

- A review of organizational materials such as job requisitions and organizational charts to learn relevant background information about the three relevant Divisions and two relevant corporate titles at Goldman Sachs.

¹ I was also asked to evaluate the job relatedness of Goldman Sachs’ (1) 360 Feedback Review process, (2) Manager Quartiling process, and (3) Cross-Ruffing process related to promotion of Vice Presidents to Extended Managing Directors. My analyses of and opinions concerning these research questions are contained in a separate report dated January 15, 2021.

² My assignment is limited to revenue-producing professionals (those with “R-coded” jobs) in the United States.

- Touring Goldman Sachs's headquarters to learn about the Firm's work environment.
- Conducting two-hour informational interviews with 14 senior executives who have broad knowledge of the work performed by Associates and Vice Presidents in a variety of Business Units within the three relevant Divisions.
- Developing testable hypotheses regarding the two questions posed by counsel.
- Creating a structured work analysis protocol to collect data that would test my hypotheses.
- Selecting a representative sample of Associates and Vice Presidents from the three relevant Divisions to study, and evaluating that sample for representativeness.
- Performing six pilot interviews to test the efficacy of the structured work analysis protocol. Once I determined the protocol functioned appropriately I began testing my hypotheses.
- Conducting full-scale work analysis interviews with an additional 83 professionals, for a total of 89 full-scale interviews.
- Coding interviewee responses so that they could be more clearly understood. This included, for open-ended responses, achieving consensus on the categorization of responses, including one consensus study in which I convened a panel of five I/O psychologists to, under my direction, perform linkage ratings between the final set of unique skills, abilities, and personal attributes and associated definitions.
- Preparing a summary role profile of each individual interviewee's work.
- Drawing conclusions and communicating them through this report.

Summary of Conclusions

It is my opinion that professionals holding the corporate titles of Associate and Vice President, respectively, do not all perform the same role. To the contrary, I found that professionals in both of these corporate titles perform myriad roles encompassing a variety of work activities, worker characteristics, and contextual work factors. Each of the corporate titles represents a job level. A corporate title is not a job in the traditional sense. I observed extensive variation for

professionals holding both corporate titles. These variations are observed both within and across Divisions for the following work elements:³

1. **Education/Certification Requirements:** This set of work elements included degree level, major, and type of professional license. Variation is observed across these elements both within and across Divisions and by function.⁴ For example, among Associates, Master's degrees and Ph.D.'s are observed more frequently in IBD and IMD compared to Securities; the majority of degrees in quantitative fields are held by Associates and Vice Presidents in Strat roles.⁵
2. **Job Responsibilities:** This set of work elements included most important responsibilities, most frequently performed tasks and how frequently those tasks are performed, critical but infrequent tasks, complexity, consequence of making a mistake, the extent to which professionals perform the same tasks each day, expectations for prospecting or business development/generation, work products/outputs/deliverables, and informal and formal supervision of others. As an illustration of the variability in roles, 177 responsibilities were identified by the 44 Associates interviewed. Similarly, 157 responsibilities were identified by the 45 Vice Presidents interviewed. Differences in the most important responsibilities were observed both within and across Divisions.
 - *Associates:* Within and across the Divisions, the most important responsibilities of professionals holding the corporate title of Associate differ widely. To illustrate, among three Associates in one Division (Securities), one is a Trader whose most important responsibilities include providing liquidity, managing risk, and monitoring the book for 100 to 200 trades daily (Associate 37), another is a Strat writing code and creating applications to manage risk and perform analyses for the stock loan desk (Associate 65), and a third is a Sales professional marketing Goldman Sachs solutions to thousands of Registered Investment Advisors and creating and pricing investment vehicles (Associate 64). Looking across Divisions, the most important responsibilities of each of these Associates in the Securities Division differ from those of Associates in other Divisions — such as the Private Wealth Management Advisor in IMD (Associate 35) whose most important responsibilities are to identify qualified high net worth prospects, arrange meetings, and onboard these individuals as clients, or the Mergers and Acquisitions professional in IBD (Associate 53) who assists oil and gas companies with mergers and acquisitions, including the underlying

³ In this executive summary I provide examples of variability for each job element but the full scope of variability is provided throughout the report.

⁴ Function refers to a unit of individuals devoted to a discrete activity such as advertising or legal services (Kurian, 2013). Function as used throughout this report includes units such as Sales, Trading, Strats, and Banking.

⁵ “By definition, a role is a set of responsibilities associated with the individual’s position” (Eys & Carron, 2001, p.364). Example Strat roles include computer scientists and mathematicians.

financial and market analysis to determine company valuations.

To give two more examples of variability in Associate job responsibilities, the most complex aspects of one IBD Associate's role includes understanding Latin American Equity Capital Markets (Associate 70), whereas another IBD Associate (Associate 8) identified valuing private companies for mergers and acquisitions. In terms of deliverables, Associate 21 in the Securities Division is accountable for derivatives based repurchasing strategies, whereas Associate 60 in the same Division is ultimately accountable for the functionality of web and mobile applications.

- *Vice Presidents:* The most important responsibilities of professionals holding the corporate title of Vice President similarly differs within and across Divisions. For example, just within IMD, the most important responsibilities for Vice President 27 in Goldman Sachs Acquisition Strategies include identifying companies that fit criteria for acquisition and subsequent public offering; Vice President 55 recruits, trains, onboards and manages a team of sales professionals; and Vice President 75 serves as an asset manager by running his/her own strategies and distributing these investment strategies (e.g., private equity funds, hedge funds, real estate funds) through third party firms and Registered Investment Advisors. The most important responsibilities of these three Vice Presidents also differ from those of Vice Presidents in other Divisions. For example, for Vice President P5 in IBD, the most important responsibilities include underwriting and closing real estate loans by performing financial due diligence. In contrast, the most important responsibilities of Vice President 25 in Securities include assisting institutional clients (i.e., hedge funds) with the investment process as it relates to public equities and coordinating with IBD to distribute initial public offering opportunities to appropriate clients/shareholders.

As with Associates, these are just examples that highlight the variability of the job responsibilities of Vice Presidents within and across the Divisions. As another example the most complex work for Vice President 69 in Securities includes complex structured trades that require an understanding of options, futures, and physical commodities, whereas for Vice President 76 in the same Division, the most complex work includes identifying signals (e.g., if oil goes up, Canadian currency will appreciate) that can be incorporated into strategies. As another example related to deliverable work product, one IBD Vice President (Vice President 14) is responsible for preparing client materials such as pitch and marketing materials, while another (Vice President 18) designs bond structures.

3. **Worker Characteristics:** This set of work elements included critical knowledges, skills, abilities, and personal attributes required for success. I observed extensive variability in knowledges, skills, abilities, and personal attributes both within and across Divisions. The performance of different tasks (e.g., developing an algorithm, researching an acquisition, managing a portfolio, selling financial products) requires different knowledges, skills, and abilities. Variation in knowledges is particularly noteworthy. Associates identified 101 unique critical knowledges required for the performance of their roles, and Vice Presidents identified 123. Furthermore, 100% of both Associates and Vice Presidents indicate unique profiles of critical knowledges as well as critical skills, abilities, and personal attributes.

- *Associates:* The critical knowledges reported by professionals holding the corporate title of Associate provide an example of worker characteristic differences within and among Divisions. Associate 11 works in an Investment Strategies role in Alternative Investments and Manager Selection Private Equity Investment in IMD and indicates knowledges such as private equity, due diligence, and infrastructure. Still within IMD, Associate P2, a liability strategist focusing on pensions in Global Portfolio Solutions, reports completely different critical knowledges: knowledge of the pension regulatory environment and financial valuation methodologies, among others. And a third IMD Associate, Associate 74, who works in Private Wealth Management Sales managing the financial lives of clients, indicates knowledges that differ further, such as macroeconomics, taxation issues, and clients' needs. Critical knowledges also vary across Divisions. Associate 5 works in a Loan Origination role in Real Estate Financing in IBD and indicates knowledges such as mathematics, alternatives, and capital markets whereas Associate 65 works in a Strat role in Equities Prime Services Desk Strats in Securities and indicates knowledges such as coding, debugging, and stock loans.
- *Vice Presidents:* The critical knowledges reported by professionals holding the corporate title of Vice President likewise differ in important ways. For example, Vice President P5 works in a Loan Origination role in Real Estate Financing in IBD and indicates knowledges such as real estate valuation, modeling, and construction risks. Vice President 18, also in IBD, reports a different set of knowledges, including bond math, the industry specific platform of Intex, and rating agency valuation methods for asset backed securities. Yet another Vice President, this one in the IBD Consumer Retail Group (Vice President 22), reports knowledges such as corporate finance principles and valuation, as well as knowledge of his/her industry (i.e., Consumer Retail). In contrast to these professionals, Vice President 75 in IMD works in an Investment Strategy Development and Sales role in Alternatives and indicates knowledges such as current alternatives, private placement rules, and financial market history. Vice President 62 works in a Client Service role in Prime Brokerage in Securities and indicates knowledges such as financing, financial regulations, and proprietary products.

4. **Contextual Work Factors:** This set of work elements included work hours, workload, travel, stress, client entertainment, and software or other tools. Although there is variability across all of these elements, variability in software and other tools (e.g., financial software, statistical software, and/or customer/relationship management software) is especially striking. The fact that Associates use 117 different tools and Vice Presidents use 90 different tools underscores the variability of the work performed by professionals within each corporate title. Moreover, 100% of Associates indicate unique profiles of software and other work tools. Similarly, 100% of Vice Presidents indicate unique profiles of software and other work tools.
- *Associates:* The majority of Associates in IBD (58.8%) indicate working more than 71+ hours/week, but the range of hours worked — from 41 to 50 hours up to 100 hours — is dramatic. The weekly hours for Associates in IMD also vary widely, ranging from less than 40 hours each week to 61 to 70 hours per week. In contrast to IBD, no Associates in IMD or Securities indicate working more than 70 hours per week. Most Associates in Securities (76.9%) indicate working 51 to 60 hours weekly, with the full range of responses spanning 41 to 70 hours per week.
 - *Vice Presidents:* Among Vice Presidents, the range of hours worked per week is wide in all three Divisions, from 41 to 50 hours to 70+ hours in IBD and Securities, and from 41 to 50 hours to 80+ hours in IMD. The highest percentage of Vice Presidents in IBD (37.5%) and IMD (50.0%) report working 51-60 hours per week, but there is broad variability in hours worked.
5. **Decision Making:** This set of work elements included autonomy, frequency of decision making, authority to determine work, and impact of decision making. Autonomy of decision making varies by Division and, generally, for both Associates and Vice Presidents, greater autonomy is observed in IMD and Securities compared to IBD. The following are examples of my findings as to Associates' and Vice Presidents' authority to determine their work; similar variability exists for other work elements relevant to decision making.
- *Associates:* Associate 15 (Financial Institutions Group, Mergers and Acquisitions) in IBD has no authority to determine his/her own work. In contrast, Associate 16 (Risk Strats), also in IBD, has complete autonomy in performing the work of assessing and conveying risk analyses to IBD. Turning to IMD, Associate 4 (Global Portfolio Solutions, Lead Portfolio Management) has some authority to determine his/her work; he/she has a lot of flexibility as long as he/she adheres to his/her role. Associate 23 (Fixed Income, Currency, and Commodities Strats) in Securities has complete authority to determine his/her own work because his/her direct manager does not tell him/her what to do so he/she decides what to spend time on.

- *Vice Presidents:* Vice President 1 (PWM Sales) in IMD has complete authority to determine his/her work since his/her group is its own franchise. Vice President 82 (Fixed Income, Currency, and Commodities, Americas Sales) in Securities has some authority to determine his/her work; it's mainly driven by the market each morning. In contrast, Vice President 18 (Structured Finance, Bond Structuring) in IBD has no authority to determine his/her work; in a quantitative role such as his/hers, the assignment is passed to him/her to complete.

6. External Clients: This set of work elements included the extent of client facing work, client type(s), number of clients, and types of projects/deals/trades. Some Associates and Vice Presidents work exclusively with external clients while others have literally no interaction with clients. The number of clients Associates interact with also varies extensively from interaction with one per day to more than 50 a day. Similarly, the number of clients Vice Presidents interact with also varies extensively from no interaction to as many as 50 per day with the exception of IBD, where the highest number of clients interacted with is 6 to 10 per day. The following are examples of my findings as to Associates' and Vice Presidents' client contact; similar variability exists for other work elements relevant to interactions with external clients.

- *Associates:* Associates in Securities have widely varying client contact, with 23.1% working with zero clients per day up to 7.7% working with 51 or more clients per day. In the other two Divisions, Associates indicate working with between zero and 6 to 10 (for IBD) or 2 to 5 (for IMD) clients on a typical day. Notably, no Associates in IMD and only 5.9% of Associates in IBD indicate working with six or more clients on a typical day, whereas 69.3% of Associates in Securities indicate working with six or more clients on a typical day.
- *Vice Presidents:* Like Associates in Securities, Vice Presidents in that Division indicated a wide range of client contact on a typical day, from zero client interactions per day up to 21 to 50. The range for Vice Presidents in IMD was equally wide, whereas for Vice Presidents in IBD, the maximum number of client interactions on a typical day was 6 to 10.

7. Team Structure: Virtually all Associates and Vice Presidents accomplish their work as part of a team, but the specific contribution a professional makes to a team varies widely across and within Divisions. Some Associates' contribute by serving as the gateway to the Firm while others serve their team as project managers. Some Vice Presidents' contribution to the team is as the client liaison while others originate and execute transactions.

- *Associates:* In IBD, Associate 53's (Natural Resources, Mergers and Acquisitions) contribution to the team is making sure everything is moving smoothly and knowing what is going on with every aspect of an assignment. In IMD, Associate 36's (PWM Sales) contribution to the team is bringing in the opportunity. In Securities, Associate 32's (Equities Americas

Trading, Equity Index Derivatives Trading) contribution to the team is providing knowledge and expertise of his/her product which is derivatives indexes.

- *Vice Presidents:* In IBD, Vice President 24's (Banker and Transportation Sector Captain, Industrials) contribution to the team is ensuring customers feel like they are getting all the attention and focus they need. He/she makes sure he/she spends time with all the decision makers on a project and is constantly talking to his/her closest customers. In IMD, Vice President 20's (Client Portfolio Management, Fundamental Equity Product Management) contribution to the team is being the leader on developing the plan for execution, project management, and launching a fund. In Securities, Vice President 31's (Equities Electronic Execution Services/Strat, Algorithm Development) contribution to the team is as the software engineer working on the design and implementation of financial software.

8. Performance Metrics: For a financial services firm such as Goldman Sachs, commercial productivity is of paramount importance, but indicators of it vary by role. Similar percentages of Associates (36.4%) and Vice Presidents (40.0%) indicate having objective performance metrics, and there is variation in performance metrics across Divisions, roles, and functions. No Associates in IBD are aware of having objective performance metrics, and many of the performance metrics for Associates in IMD and Securities are unique by Division. Likewise, the objective performance metrics for Vice Presidents are largely Division-specific.

- *Associates:* In IMD, performance metrics include assets under management, gross credits, growth in assets under management, and prospecting activity. In Securities, performance metrics include gross credits, market share, notional growth, notional traded, P&L, and ranking.
- *Vice Presidents:* Vice Presidents in IBD indicate only one performance metric – P&L/revenue. In IMD, performance metrics include alpha generation, assets under management, avoidance of defaults, beta correlation, client satisfaction/ranking, gross credits, growth in client size, number of engagements, prospecting activity, and Sharpe ratio. In Securities, performance metrics include client satisfaction/ranking, gross credits, and P&L/revenue.

9. Job Fungibility: The vast majority of professionals indicate a lack of fungibility in roles in terms of another professional either within the immediate work group or outside their immediate work group but within the Firm who could assume their role without training. Specifically, 75.0% of interviewed Associates and 88.9% of interviewed Vice Presidents are not aware of another individual within the Firm who could perform their role without training.

These results overwhelmingly establish that numerous different roles exist for professionals holding the Associate and Vice President corporate titles. For example, some roles

are technical in nature (e.g., Strats), some roles provide client service, some roles are sales oriented, some roles deliver investment strategies, and other roles focus on product development. Within both the corporate title of Associate and the corporate title of Vice President, professionals perform different work activities, interface with different client bases, have different levels of autonomy and decision making authority, and are responsible for different types of work products or deliverables. Unsurprisingly, because these different roles demand such different skills, the educational background and qualifications vary between roles.

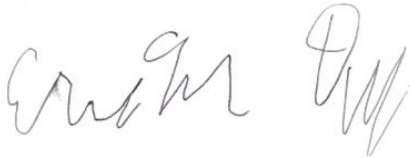
On the basis of variability described throughout this report, it is my opinion that professionals holding the corporate title of Associate cannot be considered to be performing the same job simply by virtue of corporate title and therefore cannot be considered fungible (i.e., mutually interchangeable). Similarly, it is my opinion that professionals holding the corporate title of Vice President cannot be considered to be performing the same job simply by virtue of corporate title and therefore cannot be considered fungible.

Securities are unique by Division. Similarly, the objective performance metrics for Vice Presidents are largely Division-specific.

9. **Job Fungibility:** The vast majority of professionals indicate a lack of fungibility in roles in terms of another professional either within the immediate work group or outside their immediate work group but within the Firm who could assume their role without training. Specifically, 75.0% of Associates and 88.9% of Vice Presidents are not aware of another individual within the Firm who could perform their role.

In summary, these results overwhelmingly establish that the corporate titles of Associate and Vice President do not simply represent two jobs at Goldman Sachs. On the basis of variability described throughout this report, it is my opinion that professionals holding these corporate titles cannot be considered to be performing the same job simply by virtue of corporate title and therefore cannot be considered fungible (i.e., mutually interchangeable).

Signed this 15th day of January 2021

A handwritten signature in dark ink, appearing to read "Eric M. Dunleavy", is positioned above a horizontal line.

Eric M. Dunleavy, Ph.D.

APPENDIX B
MATERIALS CONSIDERED

Materials Considered

Chen-Oster, et al. v. Goldman, Sachs & Co. and The Goldman Sachs Group, Inc.
(Case number 10-CV-06950)

I. Case Documents (legal filings)

- Memorandum in Support of Plaintiff's Motion for Class Certification, 5/19/14.
- Defendants' Memorandum of Law in Opposition to Plaintiffs' Motion for Class Certification, 7/3/14.
- Memorandum and Order from James C. Francis IV: Motion to Exclude Expert Testimony, 3/10/15.
- Report and Recommendation from James C. Francis IV: Denial of Class Certification, 3/10/15.
- Defendants' Memorandum on the Impact of Material Changes to Goldman Sachs' challenged Processes for Evaluating Professionals on Class Certification Discovery and Briefing from Defendant Attorney Robert J. Giuffra, Jr., 10/13/17.
- Opinion and Order on Class Certification from Analisa Torres, 3/30/18.
- Memorandum In Support Of Plaintiffs' Motion to Modify Schedule from Plaintiff's Attorney Kelly M. Dermody, 4/18/18.
- Plaintiffs' Responses and Objections to Defendants' Third Set of Interrogatories from Kelly M. Dermody, 4/10/19.
- Amended Pre-trial Schedule from Robert W. Lehrburger, 1/23/20.
- Declaration of Susan Benz, 7/3/14.
- Declaration of Jean Marie Bohm, 6/5/14.
- Declaration of Jacqueline Cassidy, 5/23/18.
- Declaration of Donald Casturo, 6/27/14.
- Declaration of Darren Cohen, 7/1/14.
- Declaration of Stephanie Cohen, 7/1/14.
- Declaration of Darren Cohen, 5/22/18.
- Declaration of Nora Creedon, 6/30/14.
- Declaration of Arianne Criqui, 7/2/14.
- Declaration of Samantha Davidson, 7/1/14.
- Declaration of Ashley Eckhard, 6/26/14.
- Declaration of Celeste Guth, 6/30/14.
- Declaration of Aime Hendricks, 7/1/14, and exhibits.
- Declaration of Susan Jane Scher, 6/27/14.
- Declaration of Ritu Kalra, 7/2/14.
- Declaration of Marie Louise ("Malou") Kirk, 7/2/14.
- Declaration of David Landman, 6/4/15.
- Declaration of David Landman, 5/25/17.
- Declaration of David Landman, 10/12/17.
- Declaration of John Levene, 6/30/14.
- Declaration of John Levene, 5/23/18.
- Declaration of Todd Lopez, 7/1/14.
- Declaration of Brendan McGovern, 5/22/18.
- Declaration of James McNamara, 6/30/14.
- Declaration of Alice Merrill Chester 6/30/14.
- Declaration of Cathy Obradovich, 6/12/14.
- Declaration of Craig Packer, 7/2/14.
- Declaration of Michael Perloff, 6/4/15.
- Declaration of Stephen Pierce, 7/2/14.
- Declaration of Lora Robertson, 6/24/14.

- Declaration of Peter Craig Russell, 6/30/14.
- Declaration of Carolyn Sabat, 6/26/14.
- Declaration of Luke Sarsfield, 5/22/18.
- Declaration of Clare Scherrer, 6/27/14.
- Declaration of Megan Taylor, 6/30/14.
- Declaration of Kirstine Wilson, 6/30/14.

II. Internal Documents

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- 2005 IBD and MBD HCM Team, GS0116550.
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- 2006 IBD HCM Global Team, 11/06, GS0116543 - 544.
- 2006 IMD Organizational Chart, 05/06, GS0112720.
- 2006 Overview of the IBD, GS0112920.
- 2007 IBD HCM Global Team and Employee Counts, GS0116562 - 563.
- 2007 IMD Assessment Management Overview, GS0112721.
- 2007 IMD Organizational Chart 11/07, GS0112718 - 719.
- 2007 IMD Organizational Chart 05/07, GS0112898 - 901.
- 2007 Overview of the IBD, 01/07, GS0112918 - 919.
- 2007 Overview of the IBD, 07/07, GS0112921 - 922.
- 2008 IBD/MBD HCM Global Team, 12/08, GS0116556 - 561.
- 2008 Overview of the Investment Banking Division, 06/08, GS0100618.
- 2009 IMD Organizational Chart, 04/09, GS0112715.
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- 2010 IMD Organizational Chart, 02/10, GS0112897.
- 2010 IMD Organizational Chart, Goldman Sachs Asset Management (GSAM), and Private Wealth Management (PWM), 05/10, GS0112709.
- 2010 Employee Relations New Hire Toolkit, including the Human Capital Management Operating Committee Organizational Chart 09/10, GS0003860 - 118.
- 2011 Global Securities Division Leadership Organizational Chart, GS0005048.
- 2011 IBD/IMD HCM Generalists Organizational Chart, 07/11, GS0116545 - 546.
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- 2011 IMD Organizational Chart, 04/11, GS0112710.
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- 2011 IMD Tree Flat View Component, 06/22/11, GS0099689 - 733.
- 2012 Global IMD HCM Organizational Chart, 05/02/12, GS0112711 - 714.
- 2012 IMD Organizational Chart, GS0112716.
- 2012 Organizational Tree, GS0112826 - 880.
- 2012 Overview of the IBD, 05/12, GS0112881 - 882.
- 2012 IBD/MBD HCM Generalists Organizational Chart, 05/12, GS0112883 - 884.
- Equities Leadership Organizational Chart - North America, GS0112904.
- HRWW Organizational Tree GS0112658 - 708.
- Goldman Sachs Management Committee Organizational Chart, GS0112765.
- Goldman Sachs Management Committee Organizational Chart and List of Management Committee Members, GS0112795 - 796.
- 2004 U.S. Equities Sales - Updated Organizational Chart, GS0112924.
- 2005 Fixed Income, Currency, and Commodities Division and Equities Division Organizational Charts, GS0112909 - 910.
- 2006 FICC and Equities Organizational Chart - Divisional Leadership, GS0112905.
- 2007 Equities and FICC Divisions: Organizational Structure, GS0112906 - 908.

- 2008 Securities Division Leadership, GS0112895.
- 2008 Securities Division Leadership, GS0112902.
- 2008 Securities Division Structure, GS0112903.
- 2010 Global Securities Division Leadership, GS0112892.
- 2010 - Securities Division Leadership, GS0112911.
- 2010 - Tree View for FICC and Equities, GS0109030 - 129.
- 2010 - Tree View for FICC and Equities, GS0109148 - 234.
- 2012 - Global Securities Division Leadership Organizational Chart, GS0112717.
- 2012 - Global Securities Division Leadership, GS0112722.
- 2012 - Securities Division HCM Organizational Chart, GS0109350.
- Fixed Income, Currency, and Commodities Division and Equities Division Organizational Charts, GS0112890 - 891.
- Presentation to Moody's on Securities Division, 5/25/10, GS0112912 - 917.
- Securities Division - Leadership Organization Chart, GS0005637.
- Tree View for FICC and Equities, GS0002975 - 061.
- Understanding the Strats Organization PowerPoint, 4/22/10, GS0116446 - 464.
- 2006 Firmwide Organizational Charts 07/06, GS0112752 - 764.
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- 2008 Firmwide Organizational Charts, 08/08, GS0112797 - 810.
- 2008 Human Capital Management Organizational Chart, 07/08, GS0112889.
- 2009 Firmwide Organizational Charts, 04/09, GS0112811 - 825.
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- 2006 EQ - GSOE Organizational Chart Report, 9/26/06, GS0112567 - 577.
- 2006 FICC GSOE Organizational Chart Report, 9/26/06, GS0112594 - 602.
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- 2011 FICC GSOE Organizational Chart Report, 9/27/11, GS0112642 - 657.
- 2012 EQ - GSOE Organizational Chart Report, 1/3/12, GS0112617 - 632.
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- Employee Relations Americas Client Assignments, GS0109146.
- Employee Relations Americas Client Assignments, 1/1/12, GS0109145.
- Employee Relations Americas Client Assignments, 3/1/12, GS0109029.
- Employee Relations Americas Client Assignments, 10/1/11, GS0109147.
- Americas EMEA Organization Chart GS0003207.
- New York Employee Relations Organizational Chart, 04/09, GS0000394.
- New York Employee Relations Client Assignments, 05/08, GS0100611.
- New York Employee Relations Client Assignments, 09/01/07 - 09/30/07, GS0100613.
- New York Employee Relations Client Assignments, 01/07, GS0100612.
- New York Employee Relations Client Assignments, 01/07, GS0003291.
- New York Employee Relations Client Assignments, 07/08, GS0003335.
- New York Employee Relations Client Assignments, 07/08, GS0100616.
- New York Employee Relations Client Assignments, 07/09, GS0003333.
- New York Employee Relations Client Assignments, 07/09, GS0100615.
- New York Employee Relations Client Assignments, 05/08, GS0003284.
- New York Employee Relations Client Assignments, 04/09, GS0100595.

- New York Employee Relations Client Assignments, 10/1/07, GS0100614.
- New York Employee Relations Client Assignments, 3/1/07, GS0100617.
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- 2004 Equities Annual Performance Review Process, GS0121644 - 660.
- 2005 Equities Annual Performance Review Process, GS0120226 - 246.
- 2005 Equities Annual Performance Review Process, GS0121458 - 479.
- 2006 Equities Annual Performance Review Process, GS0120523 - 547.
- 2006 Equities Annual Performance Review Process, GS0121313 - 333.
- 2007 Equities Annual Performance Review Process, GS0120135 - 157.
- 2007 Equities Annual Performance Review Process, GS0121684 - 706.
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- 2004 Fixed Income, Currency and Commodities Annual Performance Review Process, GS0120044 - 062.
- 2004 Fixed Income, Currency and Commodities Annual Performance Review Process, GS0121015 - 039.
- 2005 Fixed Income, Currency and Commodities Annual Performance Review Process, GS0121722 - 742.
- 2006 Fixed Income, Currency and Commodities Annual Performance Review Process, GS0121383 - 403.
- 2007 Fixed Income, Currency and Commodities Annual Performance Review Process, GS0121661 - 683.
- 2008 Fixed Income, Currency and Commodities Annual Performance Review Process, GS0121480 - 503.
- 2009 Fixed Income, Currency and Commodities Annual Performance Review Process, GS0121597 - 615.
- 2003 IBD/ECM Annual Performance Review Process, GS0120158 - 171.
- 2003 IBD/ECM Annual Performance Review Process, GS0120907 - 920.
- 2004 IBD Annual 360 Degree Feedback Process, GS0120653 - 686.
- 2004 IBD Annual 360 Degree Feedback Process, GS0120653 - 686.
- 2004 IBD Annual 360 Degree Feedback Process, GS0121355 - 382.
- 2005 Investment Banking Annual Performance Review Process, GS0120774 - 806.
- 2005 IBD Annual 360 Degree Feedback Process, GS0120967 - 988.
- 2006 Investment Banking Annual Performance Review Process, GS0120828 - 853.
- 2006 Performance Reviews, GS0121404 - 426.
- 2007 Investment Banking Annual Performance Review Process, GS0120326 - 346.
- 2007 Investment Banking Annual Performance Review Process, GS0121759 - 776.
- 2008 Investment Banking Annual Performance Review Process, GS0120172 - 194.
- 2008 Investment Banking Annual Performance Review Process, GS0120942 - 966.
- 2009 Investment Banking Annual Performance Review Process, GS0120710 - 730.
- 2009 Investment Banking Annual Performance Review Process, GS0121624 - 643.
- 2010 Investment Banking Annual Performance Review Process, GS0120063 - 101.
- 2011 Investment Banking Annual Performance Review Process, GS0121075 - 094.
- 2003 Investment Management Annual Performance Review Process, GS0120731 - 753.
- 2003 Investment Management Annual Performance Review Process, GS0121243 - 264.
- 2004 Investment Management Annual Performance Review Process, GS0120410 - 428.
- 2004 Investment Management Annual Performance Review Process, GS0121334 - 354.
- 2005 Investment Management Annual Performance Review Process, GS0120454 - 479.

- 2005 Investment Management Annual Performance Review Process, GS0120989 - 014.
- 2006 Investment Management Annual Performance Review Process, GS0120195 - 225.
- 2006 Investment Management Annual Performance Review Process, GS0120854 - 888.
- 2007 Investment Management Annual Performance Review Process, GS0120620 - 652.
- 2007 Investment Management Annual Performance Review Process, GS0121144 - 166.
- 2008 Investment Management Annual Performance Review Process, GS0120293 - 325.
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- 2009 Investment Management Annual Performance Review Process, GS0120429 - 453.
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- 2010 Investment Banking Annual Performance Review Process, GS0121212 - 242.
- 2010 Investment Management Annual Performance Review Process, GS0121427 - 457.
- 2011 Investment Management Annual Performance Review Process, GS0120889 - 906.
- 2010 Securities Annual Performance Review Process, GS0120548 - 579.
- 2010 Securities Annual Performance Review Process, GS0121040 - 074.
- 2011 Securities Annual Performance Review Process, GS0120025 - 043.
- 2011 Securities Annual Performance Review Process, GS0121616 - 623.
- 2007 to 2010 Job Requisitions, GS0003613-859.
- 2010-2017 Job Requisitions for TAM and iCIMS, 3/20/18, GS0382023
- 2018 Job Requisitions for IBD, CIMD, Securities, Associates and Vice Presidents, GS0772535.

III. Data Files

- Gender Class main.xlsx (produced November 12, 2012).
- Gender Class Education.xlsx (produced November 12, 2012).
- Gender Class - Main File (3-1-2018)_SENSITIVE_CONFIDENTIAL_DATA.xlsx (produced March 6, 2018).
- Gender Class - Education_SENSITIVE_CONFIDENTIAL_DATA.xlsx (produced March 5, 2018).
- Final File - Main_SENSITIVE_CONFIDENTIAL_DATA.xlsx (produced April 29, 2019).
- Gender Class Educ_SENSITIVE_CONFIDENTIAL_DATA.xlsx (produced April 29, 2019).
- 2018 Final Comp Download_SENSITIVE_CONFIDENTIAL_DATA.xlsx (produced April 29, 2019).
- Updated Class Info_SENSITIVE_CONFIDENTIAL_DATA (produced 10.30.19).xlsx (produced October 30, 2019).

IV. Depositions

- Deposition of Stephanie Blinder, 4/30/13, and exhibits.
- Deposition of Elizabeth Cogan, 2/21/13, and exhibits.
- Deposition of Lisa Donovan, 7/1/13, and exhibits.
- Deposition of Lisa Donovan, 7/2/13, and exhibits.
- Deposition of Genevieve Felix, 6/21/12, and exhibits.
- Deposition of Aime Hendricks, 9/13/12, and exhibits.
- Deposition of Jessica Kung, 7/31/13, and exhibits.
- Deposition of Jessica Kung, 8/1/13, and exhibits.
- Deposition of David Landman, 10/10/13, and exhibits.
- Deposition of David Landman, 4/3/18, and exhibits.
- Deposition of David Landman, 9/5/13, and exhibits.
- Deposition of Bruce Larson, 6/12/13, and exhibits.
- Deposition of Scott Mehling, 5/20/13, and exhibits.
- Deposition of Rodney Miller, 6/20/12, and exhibits.
- Deposition of Caroline Heller Sberloti, 7/10/13, and exhibits.

- Deposition of Caroline Heller Sberloti, 7/11/13, and exhibits.
- Deposition of Mahesh Raj, 4/29/13, and exhibits.